# INDIANA DEPARTMENT OF TRANSPORTATION
# OFFICE OF MATERIALS MANAGEMENT

## SAMPLE MATERIAL CERTIFICATION FORMS
## ITM No. 804-16P

## 1.0 SCOPE.

**1.1** This procedure covers the sample forms to be used for various types of material certifications. Type A, Type B, Type C, Type D and Buy American sample forms are in accordance with the Department's Standard Specifications, Section 916.03. The sample certificate forms contained herein pertain to specific materials.

**1.2** This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

**2.0 TERMINOLOGY.** Definitions for terms and abbreviations shall be in accordance with the Department's Standard Specifications, Section 101.

**3.0 SIGNIFICANCE AND USE.** This ITM provides sample forms containing required information about materials. Depending on the material, the forms shall be completed and submitted by the Contractor, a manufacturer, a supplier, a fabricator, or other designated companies furnishing the material to a Department contract. The information may be presented in a format convenient to the company; however, the information shall be complete, accurate, pertaining to the materials furnished, and without omissions of required information shown on the sample forms. Unless shown otherwise, the types of certifications shall be in accordance with the Department's Standard Specifications, Section 916.02.

## 4.0 SAMPLE FORMS.

| Form Name | ITM Section No. |
|---|---|
| Compliance for Plants | 4.1 |
| Nursery Inspection | 4.2 |
| Welding Electrode | 4.3 |
| Fly Ash Source | 4.4 |
| Cement | 4.5 |
| Geotextile Used under Riprap | 4.6 |
| Geotextile Used with Underdrains | 4.7 |
| Ground Granulated Blast Furnace Slag Source | 4.8 |

**4.1 Compliance for Plants.**

**CERTIFICATION OF COMPLIANCE FOR PLANTS**

I hereby certify that the following listed plants which were supplied to _____ for contract No._____ comply with Indiana Department
Contractor
of Transportation specifications set out in subsection 914.08.

The number and species of plants supplied shall be listed in this space. The species shall be the exact pay item.

I understand that State and/or Federal funds are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____
(Date) (Company of Grower)

_____
(Signature of Company Official)

I certify that the plants listed above are those used on contract _____

_____ _____
(Date) (Signature of Contractor)

**4.2 Nursery Inspection.**

**CERTIFICATE OF NURSERY INSPECTION**

No. _____Indianapolis, Indiana, Date _____

This is to certify that the nursery stock grown by _____ located at _____, Indiana, consisting of _____ acres (_____ hectares), has been inspected by the undersigned or his authorized representative, on _____, 2_____ in compliance with Indiana Code 14-24-5, 14-24-9, 14-24-10, and 14-24-11, and has been found apparently free from destructively injurious insects and plant diseases.

This certificate covers _____and is valid, unless revoked for cause until October 1, 20_____.

Signed: _____
(State Entomologist)

**4.3 Welding Electrode.**

**WELDING ELECTRODE CERTIFICATION**

_____

Manufacturer's Name and Address

Supplied to: _____

Date: _____ Quantity: _____ Order No.: _____ Project: No._____

This is to certify that _____ ASTM-AWS classification (EXXX) as
(trade name)
supplied under the above order number, is of the same classification, manufacturing process, and material requirements as the electrodes tested on _____, 2_____.

All tests required by specification AWS A5.1 or AWS A5.5 were performed in accordance with this specification and the above electrode met all the requirements. The electrodes are marked in accordance with AWS A5.1 or AWS A5.5.

The chemical and mechanical properties of the deposited weld metal were as follows:

| **Property** | **5/32 in.** | | **3/16 in.** | | **1/4 in.** | |
|---|---|---|---|---|---|---|
| | DC+ | AC | DC+ | AC | DC+ | AC |
| Tensile Strength psi | | | | | | |
| Yield Strength psi | | | | | | |
| Elongation % in 2k | | | | | | |
| Charpy V Notch Ft Lbm at ___ $^{o}$F | | | | | | |
| Manganese % | | | | | | |
| Silicon % | | | | | | |
| Nickel % | | | | | | |
| Chromium % | | | | | | |
| Molybdenum % | | | | | | |
| Vanadium % | | | | | | |
| Fillet Tests Position as required | | | | | | |
| Radiographic Test | | | | | | |

Fillet Test, Radiograph, Chemistry, and Mechanical Properties are not required for the following sizes:_____

Operations supervised by _____

**4.4 Fly Ash Source.**

**FLY ASH SOURCE CERTIFICATION**

_____, as contracted by, _____ certifies
(Broker) (Power Company)

that all class_____ fly ash, produced by the _____
(F or C) (Name and/or Unit No.)

Power Plant of _____,
(Power Company)

located in _____, _____, shipped for
(City) (State)

use on Indiana Department of Transportation projects will be produced under appropriate quality control and will comply with all AASHTO M 295 Specifications and Indiana Department of Transportation Standard Specifications requirements.

_____, as contracted by,_____
(Broker) (Power Company)

shall comply with the Indiana Department of Transportation Standard Specifications for all quality assurance testing and reporting requirements.

_____ _____
(Date) (Broker)

_____
(Signature)

_____ agrees that any part of the above named
(Power Company)
power plant associated with the production of such fly ash may be checked by properly identified representatives of the Indiana Department of Transportation.

_____ _____
(Date) (Power Company)

_____
(Signature)

**4.5 Cement.**

**CEMENT CERTIFICATION**

The _____
(Manufacturer and Location)

certifies that type _____cement in this shipment conforms to the
(type of cement)

requirements of the Indiana Department of Transportation Standard Specifications; and Source of

Shipment_____;
(if other than production location)

Purchaser and/or Consignee _____;

Point of Delivery _____;

Silo Identification _____;

Carrier and Truck Number _____;

Date of Shipment
_____;

Quantity of Cement in kilograms (pounds)
_____;

and Other Information _____

_____

If Portland-Pozzolan cement, type IP or IP-A, is being shipped, the certification shall

further state:

Class of ASTM C 618 Fly Ash _____; and Percentage of Pozzolan

_____ % based on the mass of the Portland-Pozzolan cement.

_____ _____
(Date) (Signature)

**4.6 Geotextile Used under Riprap.**

**CERTIFICATION FOR GEOTEXTILES USED UNDER RIPRAP**

_____ is a non-woven geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer material dimensionally stable with distinct and measurable openings. The plastic yarn or fibers used in this geotextile consist of a longchain synthetic polymer composed of at least 85 percent by mass of polyolefin, polyesters, or polyamides; and contains stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. This geotextile is calendered or otherwise finished so that the yarns or fibers will retain their relative position with respect to each other.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354, to represent _____ $yd^2$ of _____ geotextile, Lot No. _____. The results of testing each primary sampling unit are reported as follows:

| Test | Method | Results | |
|---|---|---|---|
| Tensile Strength | Grab Tensile Strength ASTM D 4632 | lbm | |
| Elongation | Grab Tensile Strength ASTM D 4632 | % | |
| Puncture Strength | ASTM D 4833 | lbm | |
| Trapezoid Tear | ASTM D 4533 | lbm | |
| Ultraviolet Degradation at 150 hours | ASTM D 4355 | % | |
| | | Strength retained for all classes | |
| AOS | ASTM D 4751 | | AASHTO Std. |
| Permeability** | ASTM D 4491 (permittivity) | ft/day | |

*Values represent weaker principal direction where applicable.
**The nominal coefficient or permeability was determined by multiplying permittivity value by nominal thickness. The nominal thickness is measured under a normal load of 280 psi (1.93 MPa).

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____
(Manufacturer's Name) (Signature of Manufacturer's Official)

_____ _____
(Date) (Title of Official)

**4.7 Geotextile Used with Underdrains.**

**CERTIFICATION FOR GEOTEXTILES USED WITH UNDERDRAINS**

_____ is a non-woven needle punched or heat bonded geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with each other including selvedges. The plastic yarn or fibers used in this geotextile consist of at least 85 percent by weight (mass) of polyolefin, polyesters, or polyamides; and contain stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354, to represent _____ $yd^2$ of _____ geotextile, Lot No. _____. The results of testing each primary sampling unit are reported as follows:

| Test | Method | Results | |
|---|---|---|---|
| Tensile Strength | Grab Tensile Strength ASTM D 4632 | lbm | |
| Seam Strength | ASTM D 4632 | lbm | |
| Puncture Strength | ASTM D 4833 | lbm | |
| Trapezoid Tear | ASTM D 4533 | lbm | |
| Ultraviolet Degradation at 150 hours | ASTM D 4355 | % | |
| | | Strength retained for all classes | |
| AOS | ASTM D 4751 | | AASHTO Std. |
| Permeability** | ASTM D 4491 (permittivity) | ft/day | |

*Values represent weaker principal direction where applicable.
**The nominal coefficient or permeability was determined by multiplying permittivity value by nominal thickness.

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____
(Date) (Manufacturer's Name)

_____
(Signature of Manufacturer's Official)

_____
(Title of Official)

**4.8 Ground Granulated Blast Furnace Slag Source.**

**GROUND GRANULATED BLAST FURNACE SLAG**
**SOURCE CERTIFICATION**

This is to certify that all grade _____, ground granulated blast furnace slag (GGBFS),
(100 or 120)

produced by _____
(Manufacturer's Name)

from granulated blast furnace slag from
_____
(Steel Company)

located in _____, _____
(City) (State)

manufactured at _____
(Location of Manufacturing Plant)

using _____
(Type of Manufacturing Facility)
and shipped for use on Indiana Department of Transportation projects will be produced under appropriate quality control. The GGBFS will comply with all ASTM C 989 Specification and Indiana Department of Transportation Standard Specifications requirements.

_____ also agrees that any part of the
(Manufacturer's Name)
above named steel company and its manufacturing plant associated with the production of such ground granulated blast furnace slag may be checked at regular intervals by properly identified representatives of the Indiana Department of Transportation.

As an approved source of ground granulated blast furnace slag,
_____ shall be in accordance with
the
(Manufacturer's Name)
Indiana Department of Transportation Standard Specifications for all quality assurance testing and report requirements.

_____ _____
(Date) (Manufacturer's Name)

_____
(Signature)

**4.9 Silica Fume.**

**SILICA FUME CERTIFICATION**

This is to certify that all silica fume produced by _____
(Supplier's Name)

from _____
(Manufacturer's Name)

located in _____, _____
(City) (State)

manufactured at _____
(Location of Manufacturing Plant)

using _____
(Type of Manufacturing Facility)

and shipped for use on Indiana Department of Transportation projects shall be produced under appropriate quality control. The silica fume may be checked at regular intervals by properly identified representatives of the Department.

As an approved supplier of silica fume _____
(Supplier's Name)
shall be in accordance with all quality assurance testing and reporting requirements.

_____ _____
(Date) (Supplier's Name)

_____
(Signature)

### 4.10 Type A - Epoxy Coated Reinforcing and Dowel Bars.

**EPOXY COATED REINFORCING AND DOWEL BARS**
**TYPE A CERTIFICATION**

Contract Number _____

Contractor Name _____

Steel Manufacturer Name _____

B/L, Invoice or Weigh Ticket Number _____

Material Destination (other than contract location) _____

This is to certify that the materials furnished by the coater for epoxy coated steel for the contract described above comply and are in accordance with the specification limits.

| Test | Method | Specification Limits | Range of Test Results |
|---|---|---|---|
| Epoxy Thickness | ASTM A 775 | | |
| Coating Flexibility | ASTM A 775 | | |

_____ _____
(Date) (Coater Company Name)

_____
(Signature of Coater Company Official)

_____
(Title)

### 4.11 Type B - Reinforcing and Dowel Bars.

**REINFORCING AND DOWEL BARS TYPE B CERTIFICATION**

Contract Number _____

Contractor Name _____

Steel Manufacturer Name _____

B/L, Invoice or Weigh Ticket Number _____

Material Destination (other than contract location) _____

This is to certify that for the contract described above, the materials furnished are as follows:

| Bar Designation, Grade & Heat Number | Quantity |
|---|---|
| | |
| | |
| | |

The materials comply and are in accordance with the specification limits.

| Test | Method | Specification Limits | Range of Test Results |
|---|---|---|---|
| Tensile Strength | ASTM A 615 | | |
| Yield Strength | ASTM A 615 | | |
| Elongation | ASTM A 615 | | |
| Unit Weight | ASTM A 615 | | |
| Deformation Height (reinforcing bars) | ASTM A 615 | | |

All Chemical analysis requirements are in accordance with ASTM specifications.

** This certification shall be prepared and signed by the steel supplier

_____ _____

(Date) (Steel Supplier Company Name)

_____

(Signature of Steel Company Official)

_____

(Title)

**4.12 Non-Epoxy PCC Sealer.**

**NON-EPOXY PCC SEALER CERTIFICATION**

The PCC sealer, _____,
(Sealer Name)

manufactured by_____
(Manufacturer Name)

is a _____
(Sealer Type)

based PCC sealer in accordance with NCHRP 244, Series IV, southern climate weathering test.

The percentage of active ingredients is _____.

The recommended application rate is _____.

The recommended application method is _____.

_____ _____
(Date) (Signature of Manufacturer Official)

_____
(Title of Official)

**4.13 Neutralized Vinsol Resin Air Entraining Admixtures.**

**NEUTRALIZED VINSOL RESIN AIR ENTRAINING ADMIXTURE CERTIFICATION**

_____, manufactured by _____
(Admixture Name) (Manufacturer Name)

is an aqueous solution of vinsol resin that has been neutralized with sodium hydroxide.

The ratio of sodium hydroxide to vinsol resin is one part of sodium hydroxide to _____

parts of vinsol resin, by weight (mass).

The percentage of solids based on residue at 221°F is _____.

No other additive of chemical agent is present in this solution.

The recommended dosage is _____.

_____ _____
(Date) (Signature of Manufacturer Official)

_____
(Title of Official)

## 4.14 Air Entraining Admixture Manufactured In Proportions Other Than AASHTO T 157 And Type A, B, C, D, and E Admixtures.

**AIR ENTRAINING ADMIXTURE MANUFACTURED IN PROPORTIONS OTHER THAN AASHTO T 157 AND TYPE A, B, C, D, AND E ADMIXTURES CERTIFICATION**

_____, manufactured by _____
(Admixture Name) (Manufacturer Name)

is in accordance with 912.03 for type _____, _____.
(Admixture Name)

The ion content of _____ is _____.

Chloride is not added as an ingredient of manufacture.

The recommended admixture dosage is _____.

Attached herewith are dated test reports substantiating full compliance with the specifications. If irregularities are found in the test results, copies of the original data shall be submitted prior to reconsideration of the certification.

_____ _____
(Date) (Signature of Manufacturer Official)

_____
(Title of Official)

## 4.15 Rapid Setting Patch Materials

**RAPID SETTING PATCH MATERIALS CERTIFICATION**

_____, manufactured by_____
(Rapid Setting Patch Material Name) (Manufacturer Name)

is a single packaged dry mix rapid setting patch material for use on bridge decks, highways and similar applications.

_____ requires only water just prior to mixing, does not
(Rapid Setting Patch Material Name)

contain soluble chlorides as an ingredient of manufacture, and does not require chemical additives.

_____ is packaged in _____ bags.
(Rapid Setting Patch Material Name) lb

The neat yield is _____ $yd^3$ and shall allow a _____ percent extension, by weight, with a _____ in. (mm) round aggregate.

The shelf life of _____ is _____ months.
(Rapid Setting Patch Material Name)

The repair depth range is from _____ in to _____ in.

_____ does not require curing material, nor a bonding agent
(Rapid Setting Patch Material Name)

and may be sealed with an epoxy sealer.

_____ is _____ color.
(Rapid Setting Patch Material Name)

_____ will be mixed using _____.

_____ is in accordance with ASTM C 928.
(Rapid Setting Patch Material Name)

_____ _____
(Date) (Signature of Manufacturer Official)

_____
(Title of Official)

## 4.16 Type IA Geogrid

### CERTIFICATION FOR TYPE IA GEOGRID FOR FOUNDATION

_____is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354 (3.2.1.1), to represent_____$yd^2$ of _____geogrid, Lot No._____. The material contains a minimum of 97% polypropylene in accordance with ASTM D 4101 and a minimum of 0.5% carbon black in accordance with ASTM D 1603. The results of testing each primary sampling unit are reported as follows:

| Property | Test Method | Unit | Value, min. | Test Results |
|---|---|---|---|---|
| Aperture Area | Calibered | sq. in | 1.3 | |
| Open Area | COE CW02215 | percent | > 50.0 ≤ 80.0 | |
| Tensile Modulus | | | | |
| Machine Direction | ASTM D 6637 [1,2,3] | lb/ft | 10,000 | |
| Cross Machine Direction | ASTM D 6637 [1,2,3] | lb/ft | 10,000 | |
| Ultimate Strength | | | | |
| Machine Direction | ASTM D 6637 [2,3] | lb/ft | 800 | |
| Cross Machine Direction | ASTM D 6637 [2,3] | lb/ft | 800 | |
| Ultraviolet Stability | ASTM D 4355 | --- | --- | |

1. Secant modulus at 5%.
2. Results for both the machine direction and cross machine directions are required.
3. Minimum average roll values shall be in accordance with ASTM D 4759.

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____

(Date) (Manufacturer Name)

_____ _____

(Signature of Manufacturer Official) (Title of Official)

### 4.17 Type IB Geogrid

**CERTIFICATION FOR TYPE IB GEOGRID FOR SUBGRADE**

_____is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354 (3.2.1.1), to represent_____$yd^2$ of _____geogrid, Lot No._____. The material contains a minimum of 97% polypropylene in accordance with ASTM D 4101 and a minimum of 0.5% carbon black in accordance with ASTM D 1603. The results of testing each primary sampling unit are reported as follows:

| Property | Test Method | Unit | Value, min. | Test Results |
|---|---|---|---|---|
| Aperture Area | Calibered | sq. in | 1.3 | |
| Open Area | COE CW02215 | percent | > 50.0 ≤ 80.0 | |
| Junction Strength | ASTM D 7737 | lb/ft | 788 | |
| Tensile Modulus | | | | |
| Machine Direction | ASTM D 6637 [1,2,3] | lb/ft | 10,000 | |
| Cross Machine Direction | ASTM D 6637 [1,2,3] | lb/ft | 10,000 | |
| Ultimate Strength | | | | |
| Machine Direction | ASTM D 6637 [2,3] | lb/ft | 800 | |
| Cross Machine Direction | ASTM D 6637 [2,3] | lb/ft | 800 | |
| Ultraviolet Stability | ASTM D 4355 | --- | 70% at 500 hrs | |

1. Secant modulus at 5%.
2. Results for both the machine direction and cross machine directions are required.
3. Minimum average roll values shall be in accordance with ASTM D 4759.

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____

(Date) (Manufacturer Name)

_____ _____

(Signature of Manufacturer Official) (Title of Official)

## 4.18 Type II Geogrid

### CERTIFICATION FOR TYPE II GEOGRID USED FOR EMBANKMENT

_____is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354 (3.2.1.1), to represent_____$yd^2$of _____geogrid, Lot No._____. The results of testing each primary sampling unit are reported as follows:

| Property | Test Method | Unit | Test Results |
|---|---|---|---|
| Open Area | COE CW02215 | percent | |
| Tensile Modulus | | | |
| Machine Direction | ASTM D 6637 [1,2] | lb/ft | |
| Creep Limited Strength | | | |
| Machine Direction at 5% strain | ASTM D 5262[2] | lb/ft | |
| Ultraviolet Stability | ASTM D 4355 | | |

1. Secant modulus at 2%.
2. Minimum average roll values shall be in accordance with ASTM D 4759.

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

_____ _____

(Date) (Manufacturer Name)

_____

(Signature of Manufacturer Official)

_____

(Title of Official)

## 4.19 Type III Geogrid

**CERTIFICATION FOR TYPE III GEOGRID USED FOR MODULAR BLOCK WALL**

_____is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354 (3.2.1.1), to represent_____$yd^2$of _____ geogrid, Lot No._____. The material shall be high-density polyethylene, HDPE, polypropylene, PP, or polyester, PET, polymers and have the following properties. The results of testing each primary sampling unit are reported as follows:

| Property | Test Method | Unit | Results (Min) |
|---|---|---|---|
| Open Area | COE CW 02215 | percent | |
| Ultraviolet Stability | ASTM D 4355 | --- | |
| Ultimate Strength, Machine Direction | ASTM D 6637 | lb/ft | |
| Long-Term Design Strength, Allowable, LTDS, Machine Direction | GRI-GG4 | lb/ft | |

1. Geogrid shall have an adequate open aperture to establish proper interlock between geogrid and backfill material.
2. Minimum Average Roll Value, MARV, in accordance with ASTM D 4759 shall be calculated as the average minus two standard deviations.
3.

$$LTDS = \frac{T_{ult}}{(RF_{CR})(RF_{IR})(RF_{D})}$$

Where:

$T_{ult}$ = Ultimate strength
$RF_{CR}$ = Reduction factor for creep
$RF_{IR}$ = Reduction factor for installation damage
$RF_{D}$ = Reduction factor for durability

4. The minimum reduction factors for design are as follows:
   $RF_{CR}$ = 2.6 for HDPE, 4.0 for PP, 1.6 for PET
   $RF_{IR}$ = 1.10
   $RF_{D}$ = 1.10

5. Independent-laboratory test results for creep test in accordance with ASTM D 5262 shall be submitted.

**CERTIFICATION TYPE III GEOGRID USED FOR MODULAR BLOCK WALL**

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Date) (Manufacturer Name)

(Signature of Manufacturer Official)

(Title of Official)

## 4.20 Compliance for Coating Formulation

**COATING FORMULATION CERTIFICATION**

This certifies the coating formulation _____
(Formulation or Product Identification)

of _____ manufactured by _____
(Type of Coating) (Manufacturer Name)

at _____
(Plant Location, City & State)

is in accordance with the Indiana Department of Transportation Standard Specifications.

No changes have been made to the formulation or to the production process for this coating. The QCP and MSDS for this coating has been provided to the Office of Materials Management and is current.

_____ _____
(Date) (Signature of Manufacturer Representative)

_____
(Title)

### 4.21 Compliance for Structural Steel Coating Systems

**STRUCTURAL STEEL COATING SYSTEMS**
**CERTIFICATION**

This certifies the structural steel coating system consisting of

_____, _____
(Primer Identification) (Intermediate Coating Identification)

and _____ manufactured by
(Finish Coat Identification)

_____
(Manufacturer Name)

at _____
(Plant Location City & State)

is in accordance with INDOT Standard Specifications. No changes have been made to the formulations or the production process of these coatings. The QCP and MSDS for these coatings have been provided to the Office of Materials Management and are current.

_____ _____
(Date) (Signature of Manufacturer Representative)

_____
(Title)

## 4.22 Annual Certification Letter for Reflective Sheeting

**REFLECTIVE SHEETING**
**ANNUAL CERTIFICATION LETTER**

This certifies the reflective sheeting types listed below are in accordance with INDOT Standard Specifications. No changes have been made to the production process. The material is the same material as the material that was furnished for the evaluation sample and was subsequently placed on the Indiana Department of Transportation list of approved materials for Reflective Sheeting. The Manufacturer is:

_____

(Manufacturer Name)

at _____

(Manufacturer Address)

and the list of products are:

| Product Name/Number | AASHTO Type | Adhesive Class | Color |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

_____ _____

(Date) (Signature of Manufacturer Representative)

_____

(Title)

**4.23 Profile Wall HDPE Liner Pipe Certification.**

**CERTIFICATION FOR PROFILE WALL HDPE LINER PIPE**

This certifies the Profile Wall HDPE Liner Pipe _____ ,
(Product Trade Name)
of _____ nominal diameter, manufactured by _____
(size) (Manufacturer Name)
at _____
(Plant location, City & State)
is in accordance with the Indiana Department of Transportation Standard Specifications and ASTM F 894. This material is to be used for and by the following and is substantiated by the test results included herein.

Contract Number _____ Contractor Name _____
Identifying Print Line Information _____
or Lot Number _____
Material Destination (if other than contract location) _____

| Test | Method | Specification Limits | Test Results |
|---|---|---|---|
| Resin Density | ASTM D 3350 | 0.940, minimum | |
| Resin Melt Index | ASTM D 3350 Condition (190, 2.16) | 0.4, maximum | |
| RSC* | ASTM F 894 @ 3% Deflection | 160 minimum for circular installations, 250 minimum for deformed installations | |
| ID | ASTM F 894 | ** | |
| Wall Thickness (Pipe) | ASTM F 894 | ** | |
| Wall Thickness (Bell) | ASTM F 894 | ** | |
| Wall Thickness (Spigot) | ASTM F 894 | ** | |
| Flattening | ASTM F 894 (after 40% Compression) | No Defects per F894 on any of the three test specimens | |
| Length | ASTM F 894 | ± 2 in. of specified or nominal length | |

*In lieu of RSC, the PS (in accordance with ASTM F 894, X1) may be reported, provided the adjustment factor C, in accordance with ASTM D 2412, and the mean diameter D, are also reported.
**These values vary depending on the pipe size. Contractor shall include the appropriate value from ASTM.

Joint Type (Circle one): Bell/Spigot Screw Type Grooved Press-On Butt Fused Ext. Welded

Other (specify) _____

_____ _____ _____
(Date) (Signature of Manufacturer's Representative) (Title)

**4.24 Solid Wall HDPE Liner Pipe Certification.**

**CERTIFICATION FOR SOLID WALL HDPE LINER PIPE**

This certifies the Solid Wall HDPE Liner Pipe, _____ ,
(Product Trade Name)

of _____ nominal diameter, manufactured by _____
(size) (Manufacturer Name)

at _____
(Plant location, City & State)

is in accordance with the Indiana Department of Transportation Standard Specifications and AASHTO M 326 or ASTM F 714. This material is to be used for and by the following and is substantiated by the test results included herein.

Contract Number _____ Contractor Name _____
Identifying Print Line Information _____
or Lot Number _____
Material Destination (if other than contract location) _____

| Test | Method | Specification Limits | Test Results |
|---|---|---|---|
| Resin Density | ASTM D 3350 | 0.940 – 0.955 | |
| Resin Melt Index | ASTM D 3350 Condition (190, 2.16) | 0.15, maximum | |
| Liner OD | AASHTO M 326 | * | |
| Liner Wall Thickness or ID | AASHTO M 326 | Nominal OD, in in., divided by 32.5, minimum (For 12 in. use 12.750 in. and for 13 in., use 13.375 in.)Given ID, subtract from OD provided and divide by 2 to determine wall thickness, then use spec above | |
| Liner DR (Actual Calculated) | AASHTO M 326 | 30.0, minimum | |
| Length | AASHTO M 326 | Minimum of 99% of specified length, or 1/2 in. less than specified length, whichever is shorter | |

* These values vary depending on the pipe size. Contractor shall include the appropriate value from AASHTO.

Joint Type (Circle one): Bell/Spigot Screw Type Grooved Press-On Butt Fused Ext. Welded
Other (specify) _____

_____ _____ _____
(Date) (Signature of Manufacturer's Representative) (Title)

**4.25 Asphalt Emulsion**

## TYPE A CERTIFICATION FOR ASPHALT EMULSION

Emulsion Supplier: _____ and _____
Name Source Number

Sample Identification: _____

Represented Quantity: _____ Sample Date: _____
Gallons

| Test Method | Asphalt Emulsion | | |
|---|---|---|---|
| | Property | *Limits | Results |
| AASHTO T 59 | Viscosity, Saybolt Furol | | |
| AASHTO T 59 | Demulsibility | | |
| AASHTO T 59 | Oil Distillate by Distillation | | |
| AASHTO T 59 | Residue by Distillation | | |
| AASHTO T 59 | Sieve Test | | |
| AASHTO T 49 | Penetration @ 25$^{o}$C | | |
| AASHTO T 50 | Float Test @ 60$^{o}$C | | |
| AASHTO T 301 | Elastic Recovery @ 4$^{o}$C (if applicable) | | |

*Standard Specification section 902.01(b)

The represented quantity (gallons) noted for this asphalt emulsion conform to Standard Specification section 902.01(b).

This material has been sampled and tested within the last 14 calendar days.

Certification is valid for 14 days after date of signature.

Signature:_____ Date:_____
Representative

**4.26 Annual Certification for Delineators.**

## ANNUAL CERTIFICATION FOR DELINEATORS

Delineator Manufacturer: _____
Name

Manufacturer Address: _____
Address

| Model Number | Description | Approval Number |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

This certifies the delineators listed above are in accordance with INDOT Standard Specifications. No changes have been made to the production process. The material is the same material as the material that was furnished for the evaluation sample and was subsequently placed on the Indiana Department of Transportation list of approved materials for Delineators.

The represented delineator(s) conform to Standard Specification section 926.02

Signature: _____ Date: _____
Representative